

MOORING SUPPORT STRUCTURE

TRANSFER SYSTEM

CRANE

6.1M

14.5M

DESIGN DRAFT

(-) 19.6M

YOKE

JACKET

PILES

HOSE DECK
ELEV. (+)29.15M

TURNTABLE DECK
ELEV. (+)20.53M

MANIFOLD DECK
ELEV. (+)8.0M
RISER CONNECTION DECK
ELEV. (+)5.0M

SOPEC

HOUSTON, TEXAS

1104

1:500

07/14/99

CNOOC

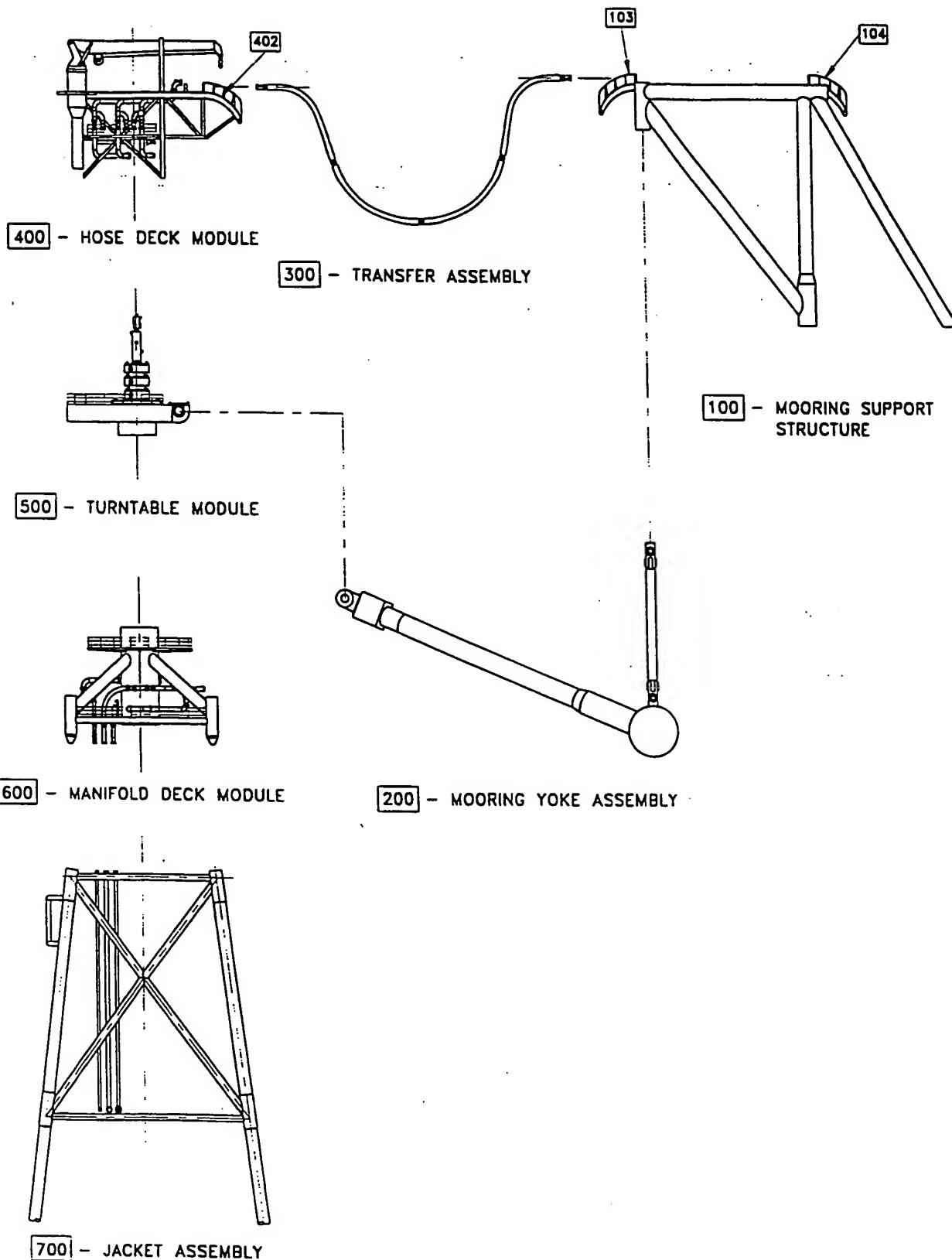
QHD 32-6 OIL FIELD
BOHAI BAY, PRC

TOWER YOKE MOORING SYSTEM

GENERAL ARRANGEMENT
ELEVATION

P1104-AA-01

B



SOFEC

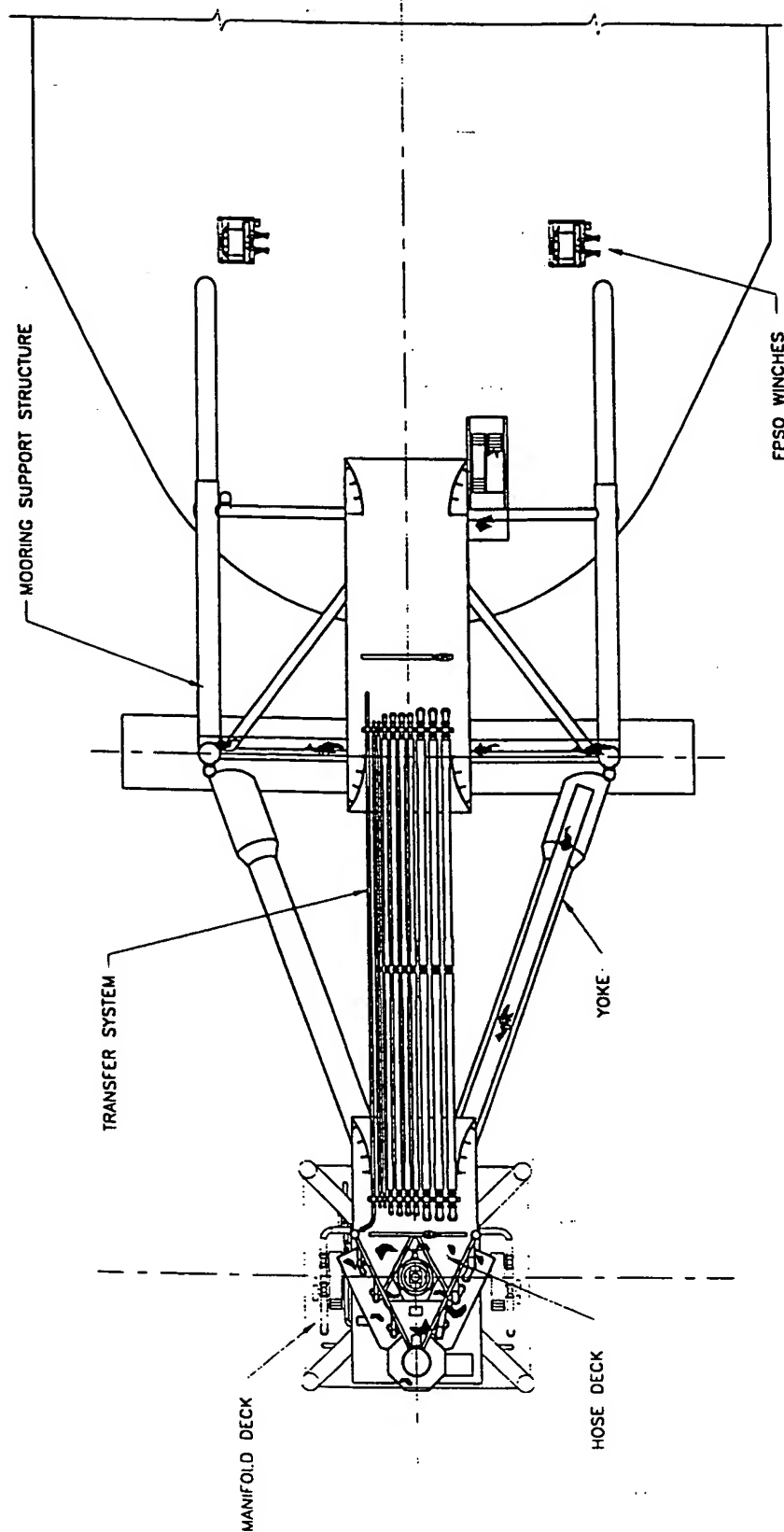
HOUSTON, TEXAS

1104
1:600
JMC 07/24/85
WCP

CNOOC
QHD 32 - 6 OIL FIELD
BOHAI BAY, PRC

TOWER YOKE MOORING SYSTEM
MODULAR ARRANGEMENT
FOR
SCOPE OF WORK

P1104-AA-00



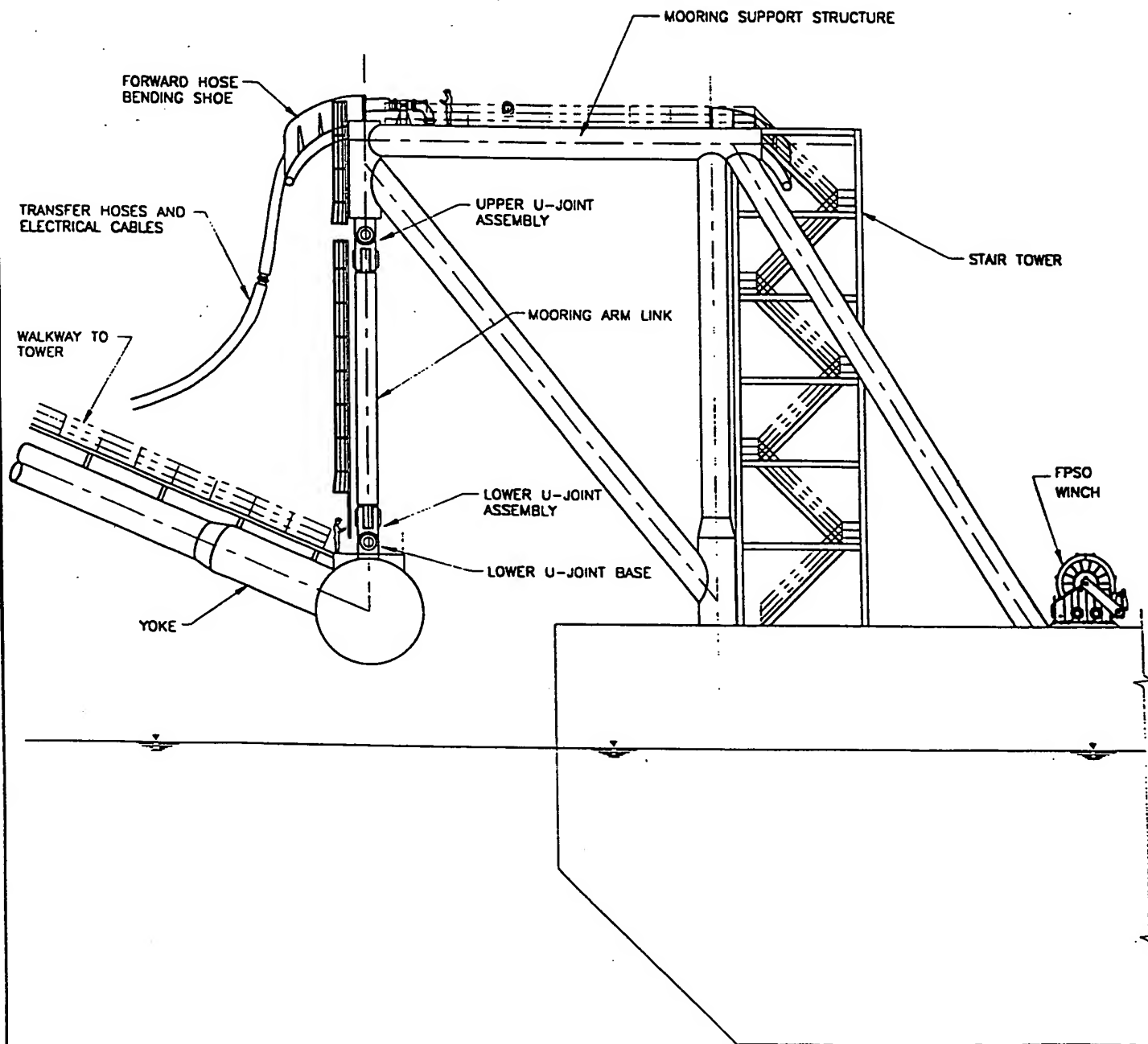
SOPEC

HOUSTON, TEXAS

1104
1:500
07/24/90

CNOOC
QHD 32-6 OIL FIELD
BOHAI BAY, PRC

TOWER YOKE MOORING SYSTEM
GENERAL ARRANGEMENT
PLAN VIEW
P1104-AA-02
B



SOPEC

HOUSTON, TEXAS

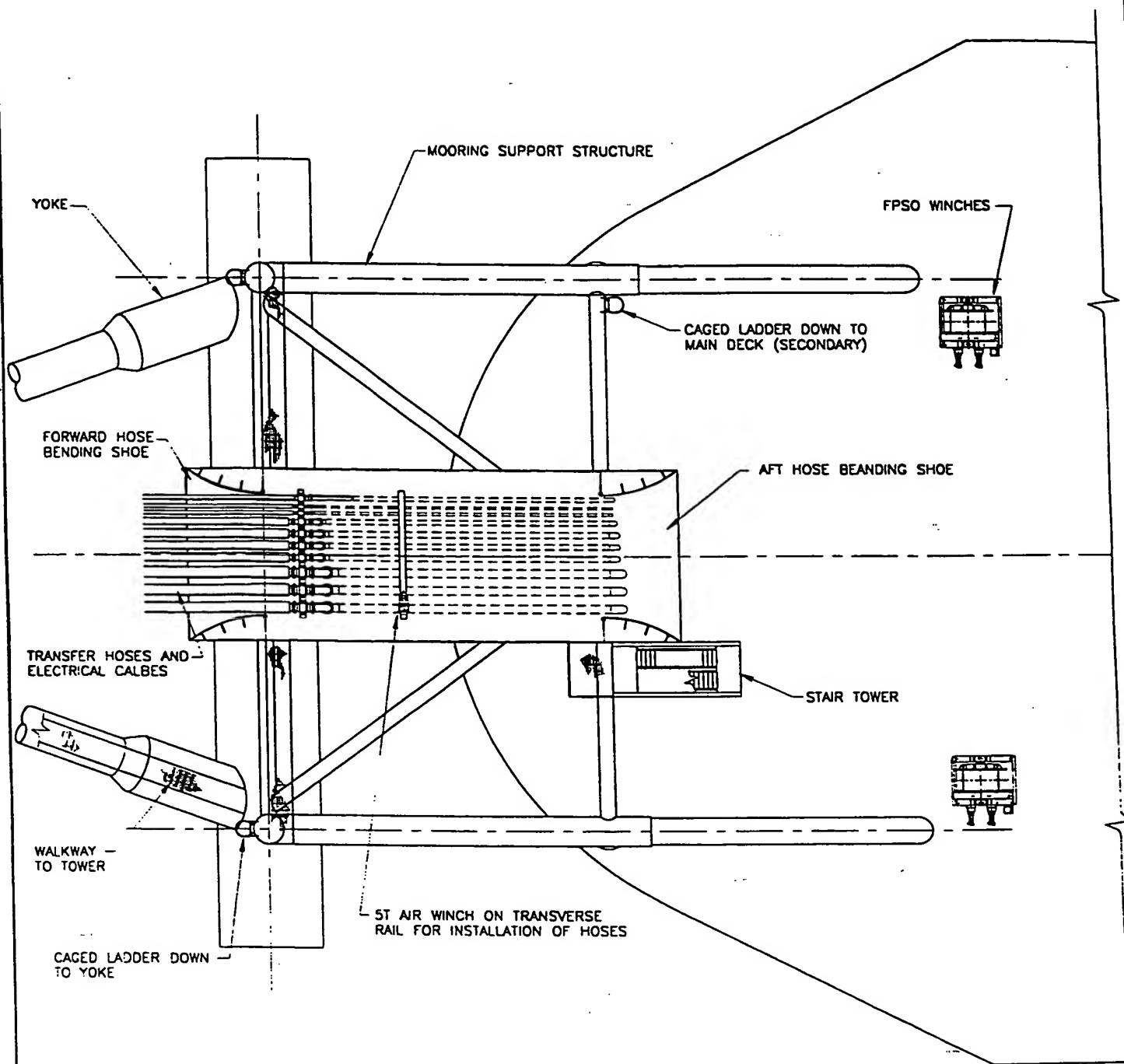
1104
1:300
JAC 08/02/99

CNOOC
QHD 32-6 OIL FIELD
BOHAI BAY, PRC

TOWER YOKE MOORING SYSTM
GENERAL ARRANGEMENT
MOORING SUPPORT STRUCTURE
ELEVATION

P1104-AA-08

8



SOPEC

HOUSTON, TEXAS

100101 OF 100101

1104
1:300
08/02/98

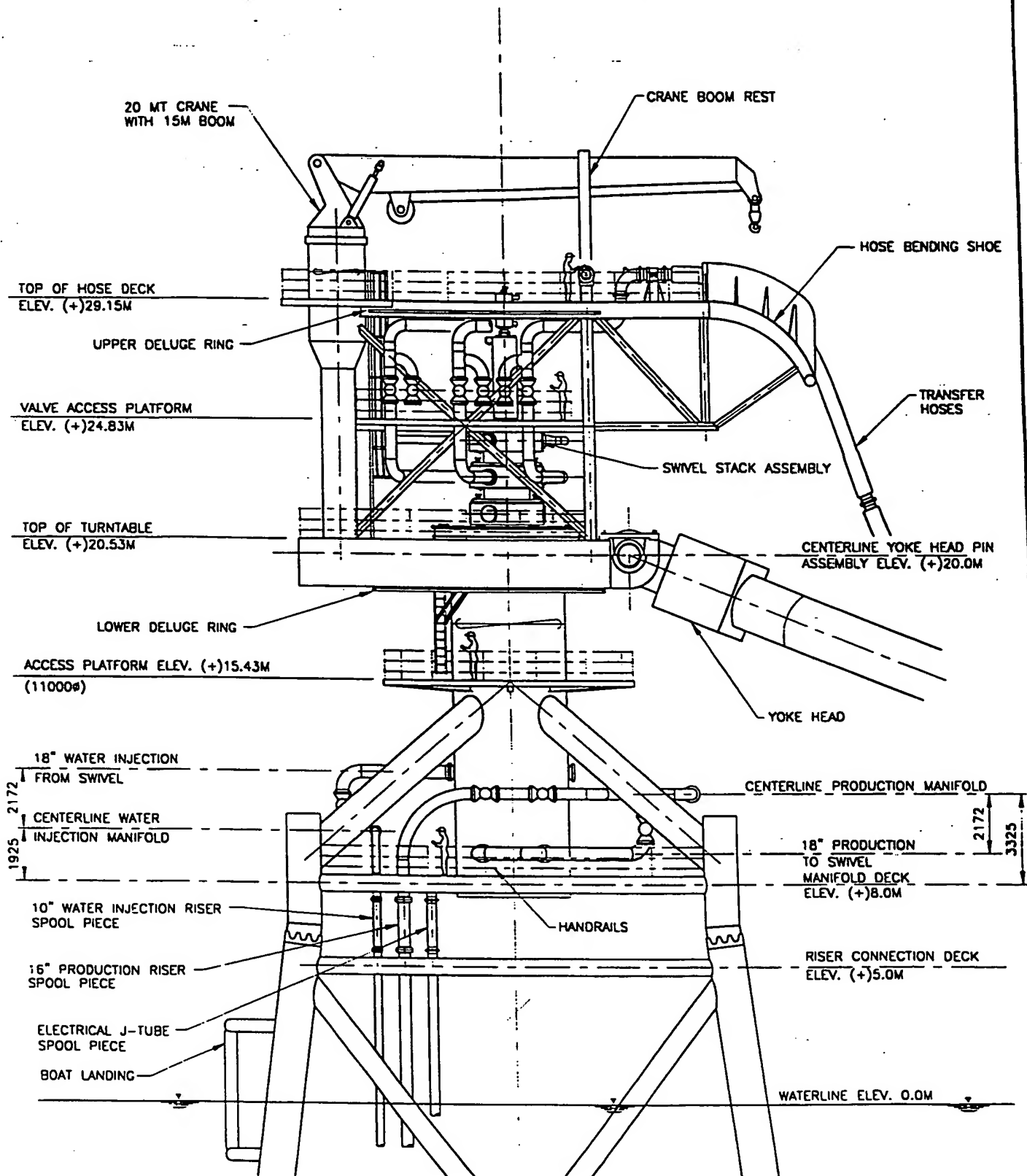
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QHD 32-6 OIL FIELD
BOHAI BAY, PRC

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TOWER YOKE MOORING SYSTEM
GENERAL ARRANGEMENT
MOORING SUPPORT STRUCTURE
PLAN VIEW

P1104-AA-09

8



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HOUSTON, TEXAS

1104
1:200
07/22/99

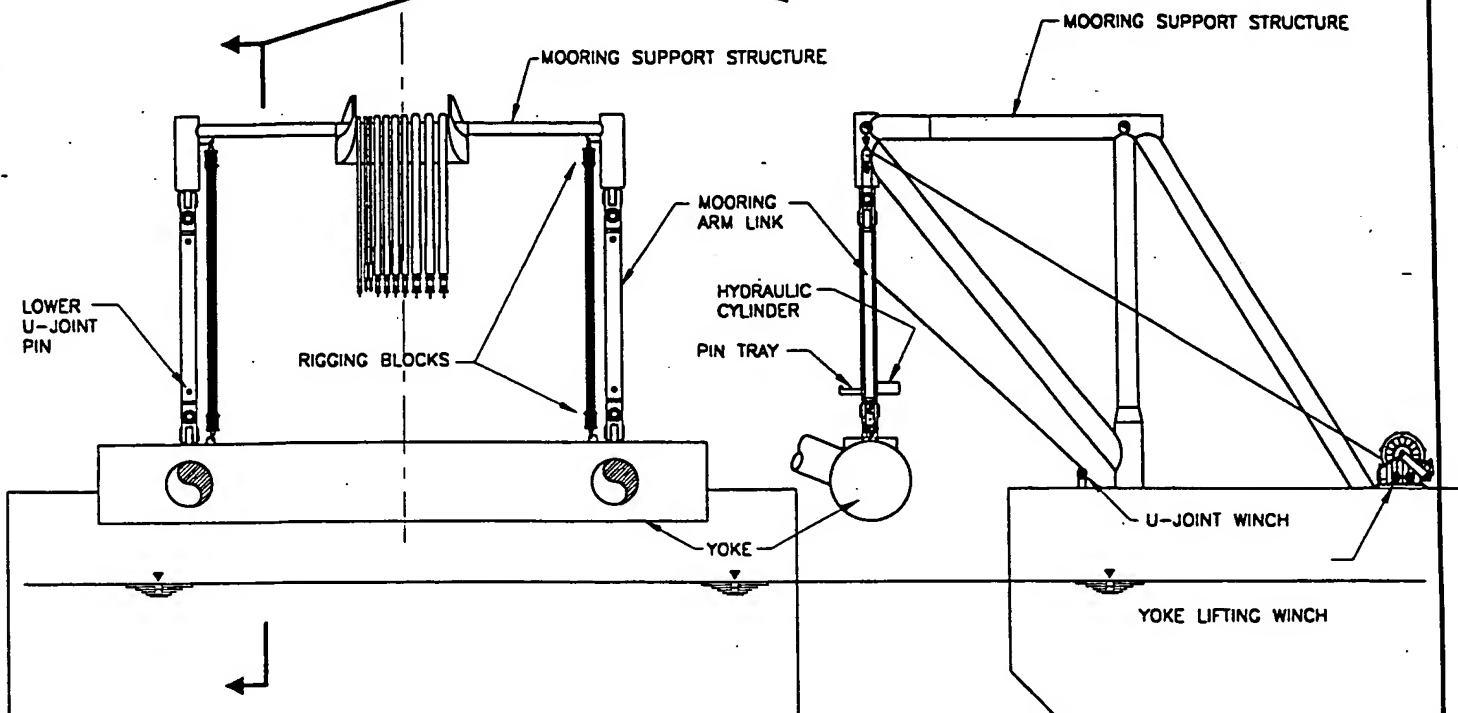
CNOOC
QHD 32-6 OIL FIELD
BOHAI BAY, PRC

TOWER YOKE MOORING SYSTEM
GENERAL ARRANGEMENT
UPPER TOWER

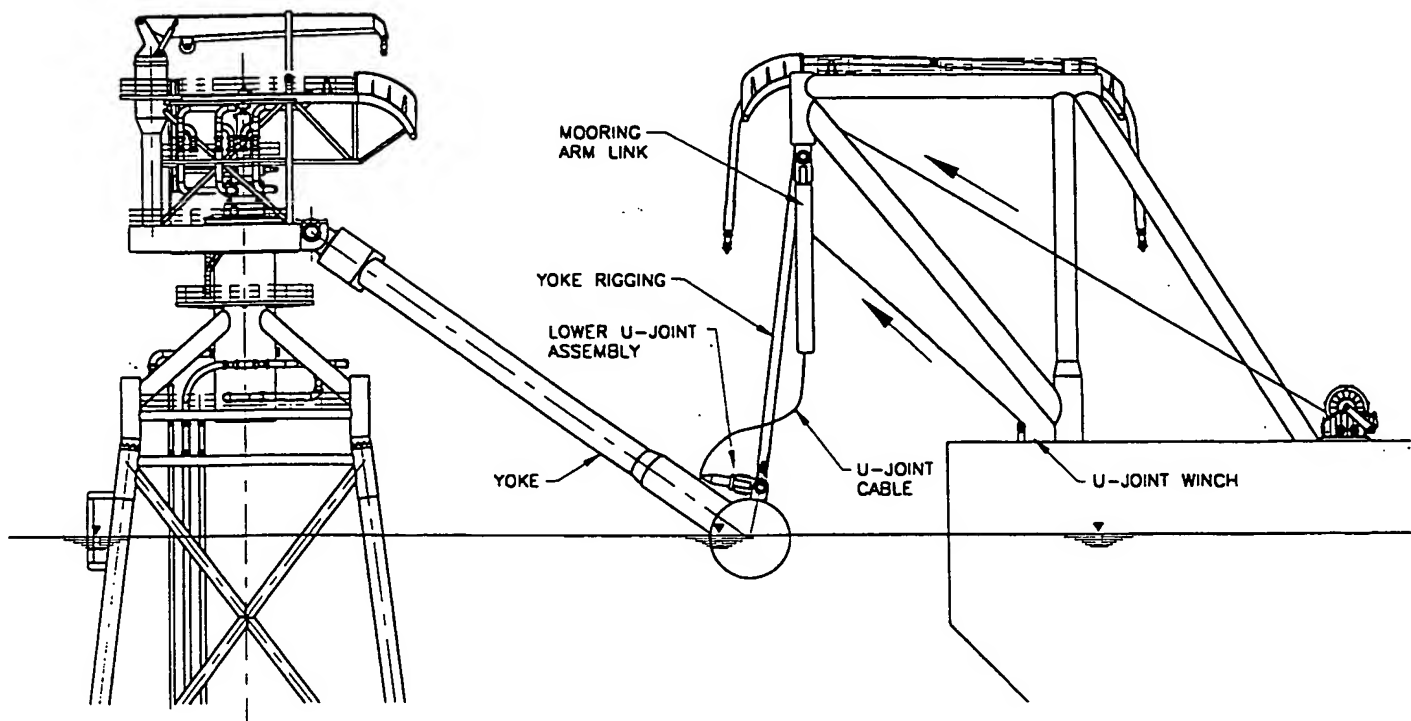
P1104-AA-03

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2/2



1. AFTER HOSES ASSEMBLIES ARE SECURED TO MOORING SUPPORT STRUCTURE, THE YOE LIFTING WINCH IS RIGGED TO DISCONNECT YOE FROM FPSO.
2. ATTACH RIGGING BLOCKS TO MOORING SUPPORT STRUCTURE AND YOE.
3. DEBALLAST YOE.
4. USING YOE LIFTING WINCH SLIGHTLY LIFT YOE, AND REMOVE LOWER U-JOINT PIN WITH HYDRAULIC CYLINDER ASSEMBLY.



5. SLOWLY PAY-OUT ON YOE LIFTING WINCH AND LOWER YOE INTO WATER.
6. AFTER YOE IS FLOATING, SECURE LOWER U-JOINT ASSEMBLY AND DISCONNECT YOE RIGGING AND U-JOINT CABLE FROM YOE.

SOPEC

HOUSTON, TEXAS

An FMC Corporation subsidiary

PROJECT 1104
SCALE: 1:500
DATE 06/05/98
DRAWN JMC
CHECKED
DESIGNED

CNOOC
QHD 32-6 OIL FIELD
BOHAI BAY, PRC

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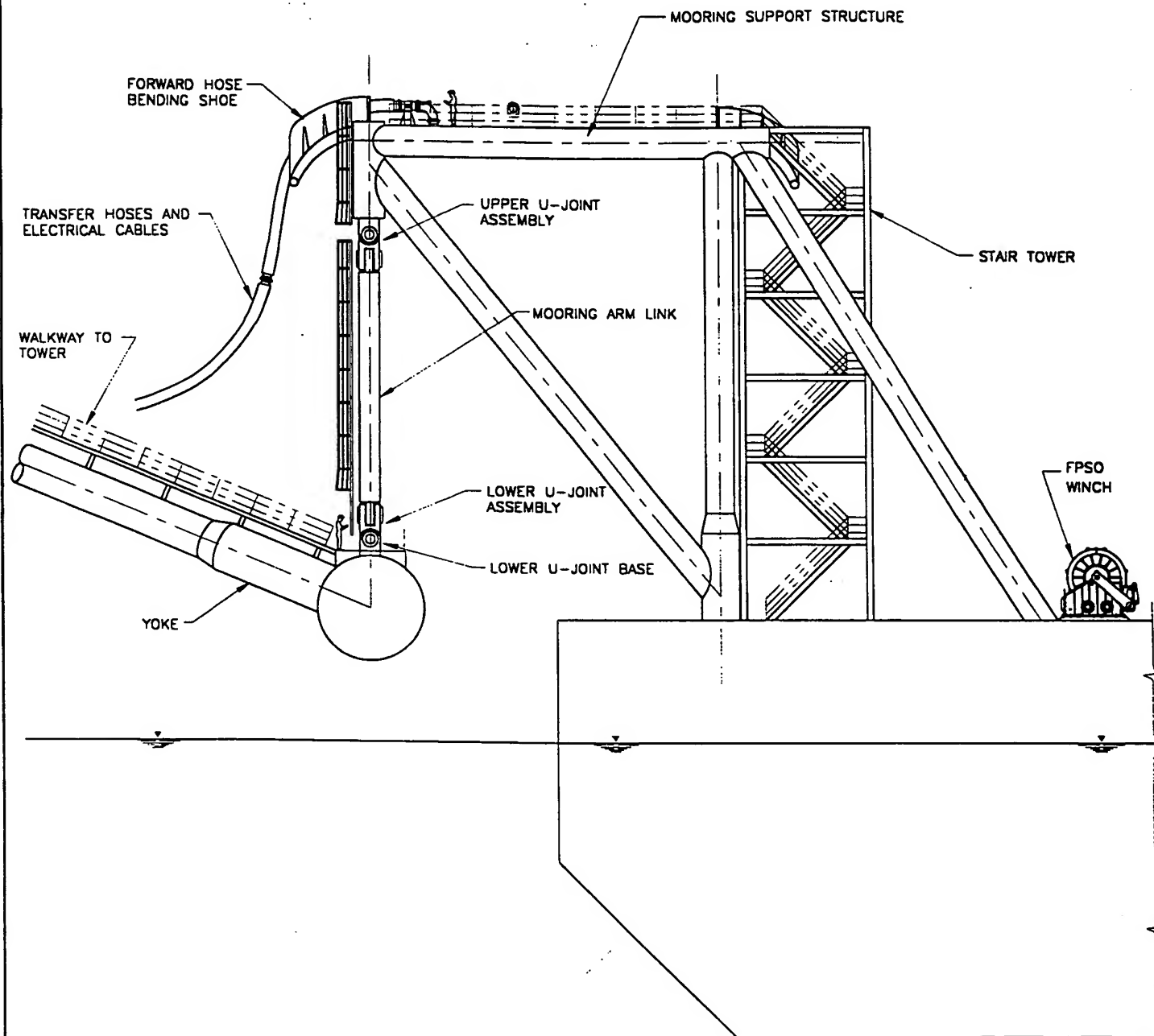
TOWER YOE MOORING SYSTEM
YOE DISCONNECT

DRAWING NO.

P1104-AA-13

REVISION

8



SOFEC

HOUSTON, TEXAS

AN OGC CORPORATION SUBSIDIARY

PROJECT NO. 1104
SCALE: 1:300
DRAWN BY JMC DATE 08/02/99
CHECKED
DESIGNER

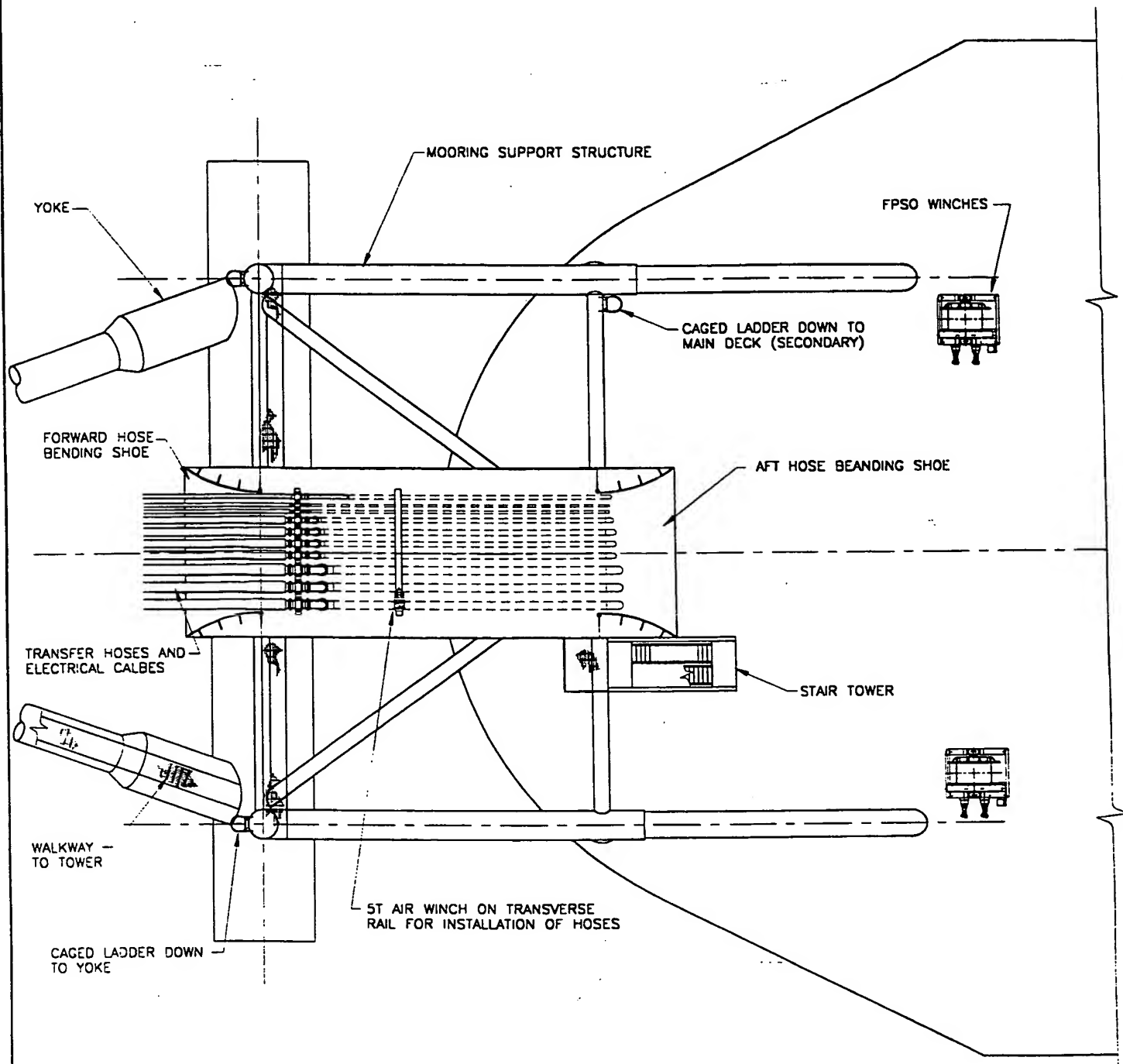
CNOOC
OHD 32-6 OIL FIELD
BOHAI BAY, PRC

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TOWER YOKE MOORING SYSTM
GENERAL ARRANGEMENT
MOORING SUPPORT STRUCTURE
ELEVATION

DRAWING NO. P1104-AA-08

REVISION
B



SOPEC

HOUSTON, TEXAS

An FPSO Corporation subsidiary

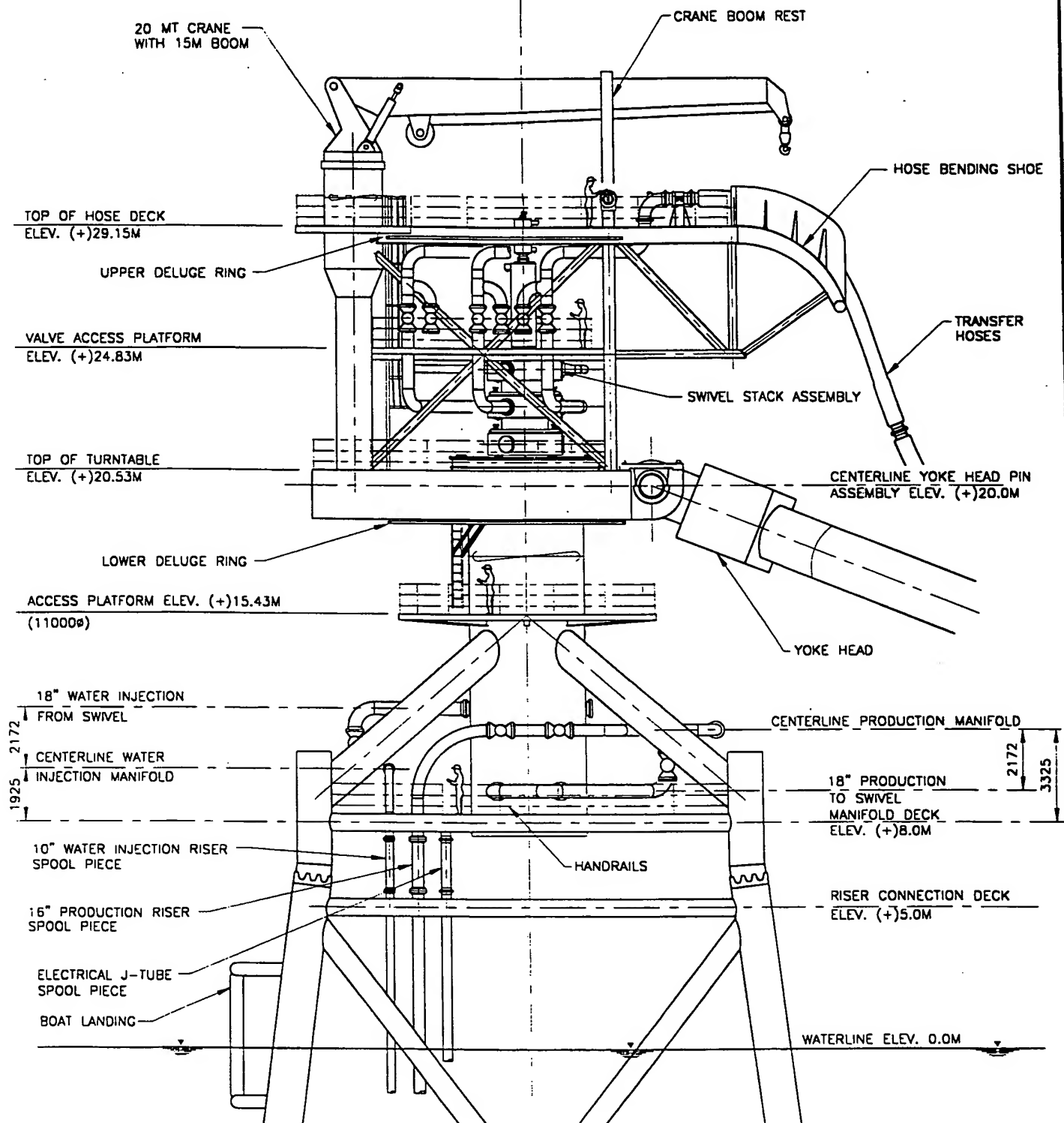
PROJECT NO.	1104
SCALE	1:300
DRAWN	JMC
CHECKED	06/02/95
DESIGNER	

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QHD 32-6 OIL FIELD
BOHAI BAY, PRC

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TOWER YOKE MOORING SYSTEM
GENERAL ARRANGEMENT
MOORING SUPPORT STRUCTURE
PLAN VIEW

DRAWING NO.	P1104-AA-09	REVISION	8
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SOPEC

HOUSTON, TEXAS

PROJECT NO. 1104
SCALE: 1:200
DRAWN BY JMC
DATE 07/22/95
CHECKED
DESIGNER

CNOOC
QHD 32-6 OIL FIELD
BOHAI BAY, PRC

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TOWER YOKE MOORING SYSTEM
GENERAL ARRANGEMENT
UPPER TOWER

DRAWING NO. P1104-AA-03

REVISION
B

MOORING SUPPORT STRUCTURE

TRANSFER SYSTEM

CRANE

6.1M 14.5M
DESIGN DRAFT

(-) 19.6M

YOKE

JACKET

PILES

HOSE DECK
ELEV. (+)29.15M

TURNABLE DECK
ELEV. (+)20.53M

MANIFOLD DECK
ELEV. (+)18.0M
RISER CONNECTION DECK
ELEV. (+)15.0M

SOPEC

HOUSTON, TEXAS

SOPEC Corporation subsidiary

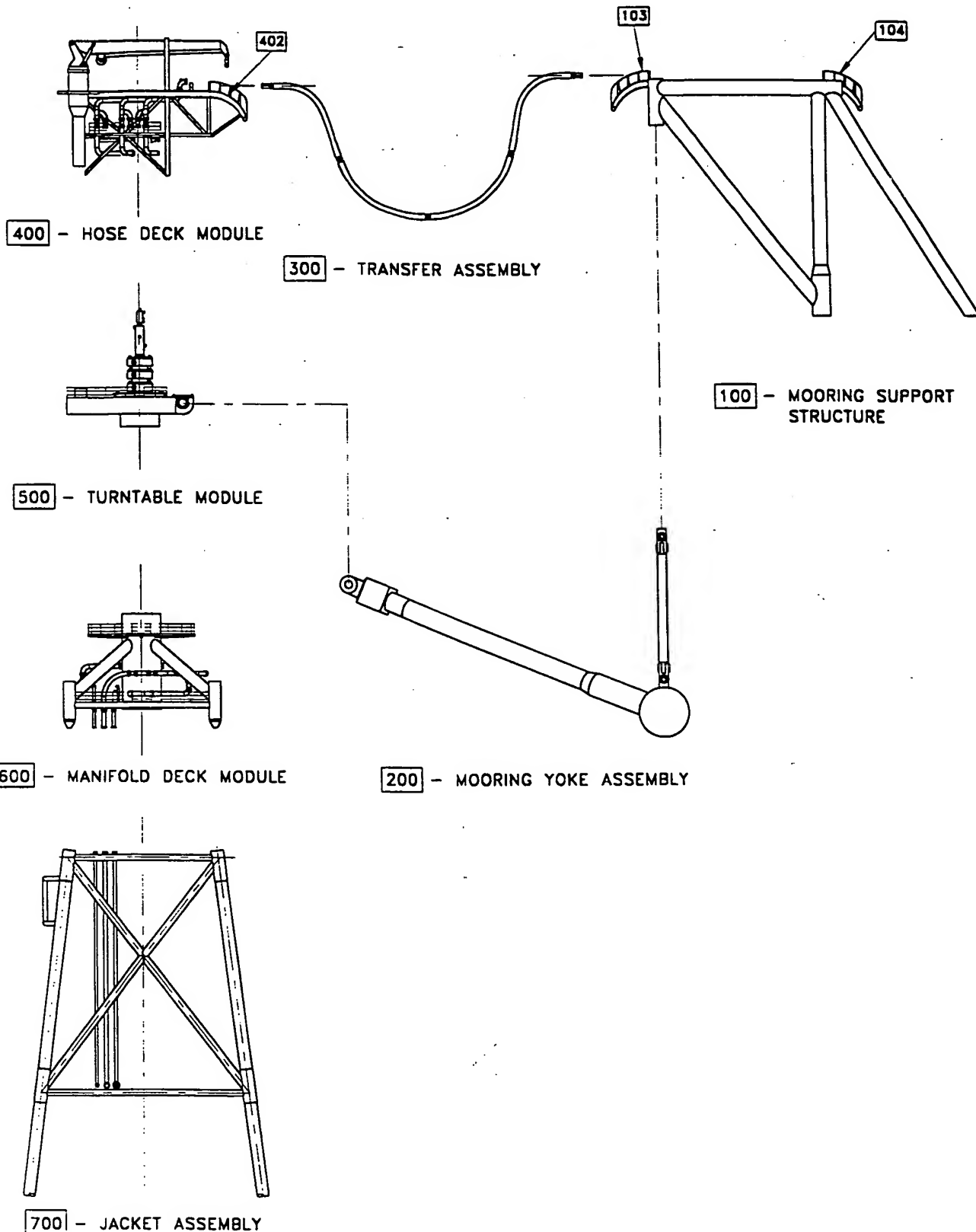
PROJECT NO.	1104
SCALE	1:500
DATE	07/14/90
DESIGNED BY	JMC
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CNOOC
QHD 32-6 OIL FIELD
BOHAI BAY, PRC

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TOWER-YOKE MOORING SYSTEM
GENERAL ARRANGEMENT
ELEVATION

DRAWING NO. P1104-AA-01 8



SOPEC

HOUSTON, TEXAS

SOPEC Corporation was a subsidiary of

PROJECT NO.	1104
SCALE	1:600
DRAWN	JME
CHECKED	JME
DATE	07/24/88
DESIGNER	

CNOOC
OHD 32 - 6 OIL FIELD
BOHAI BAY, PRC

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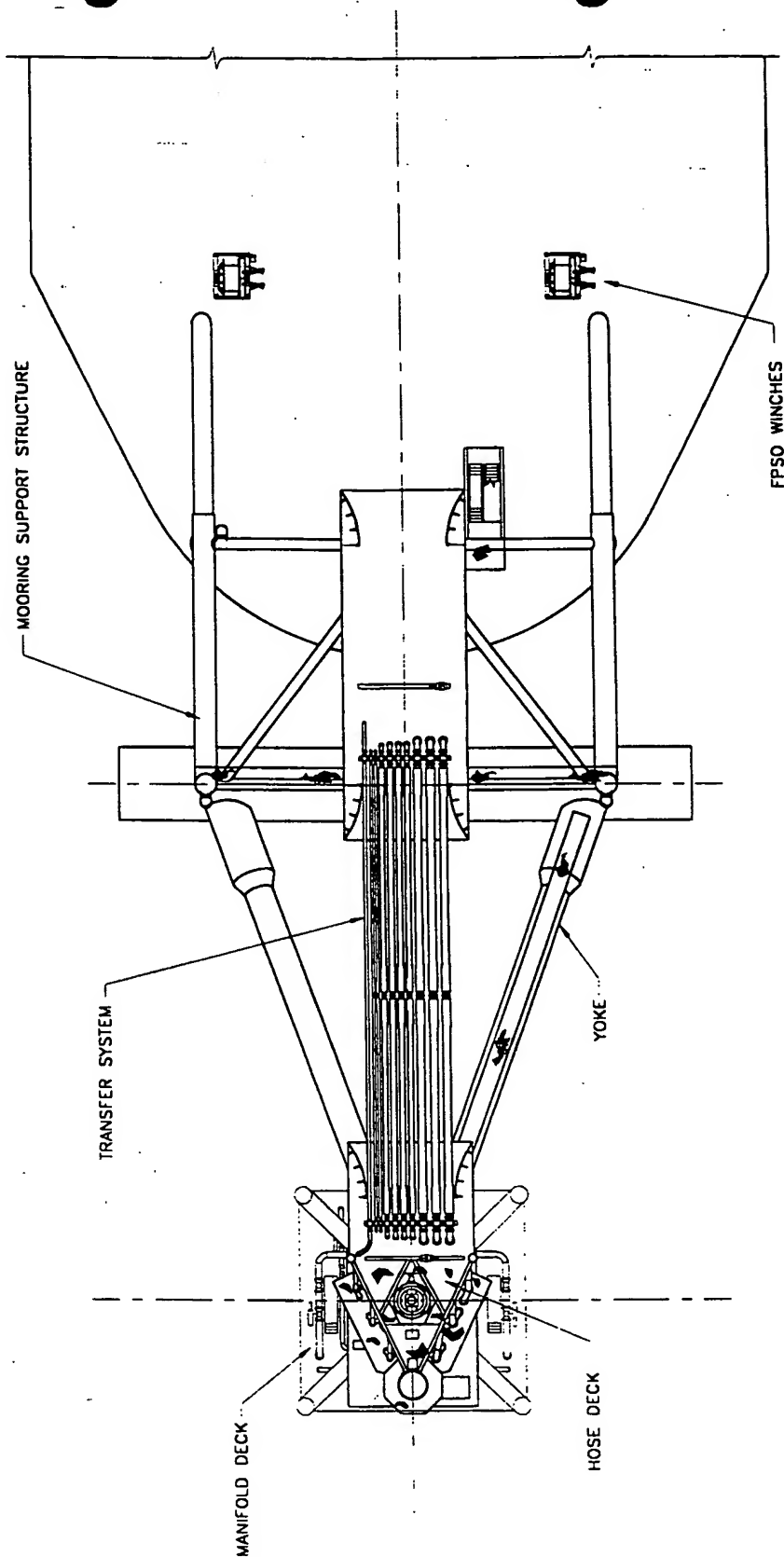
TOWER YOKE MOORING SYSTEM
MODULAR ARRANGEMENT
FOR
SCOPE OF WORK

DRAWING NO.

P1104-AA-00

REV. 5/88

8



SOFEC

HOUSTON, TEXAS

SOFTCO Corporation subsidiary

PROJECT NO.	1104
SCALE	1:500
DATE	07/24/98
DESIGNED BY	JMC
CHECKED	
DESIGNER	

CNOOC
QHD 32-6 OIL FIELD
BOHAI BAY, PRC

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TOWER YOKE MOORING SYSTEM
GENERAL ARRANGEMENT
PLAN VIEW

P1104-AA-02

REVISION
B

P1104-AA-02